



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,565	12/01/2000	Barry Sinex	S834.12-0006	4317
164	7590	05/02/2006	EXAMINER TO, TUAN C	
KINNEY & LANGE, P.A. THE KINNEY & LANGE BUILDING 312 SOUTH THIRD STREET MINNEAPOLIS, MN 55415-1002			ART UNIT 3663	PAPER NUMBER

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/728,565

Applicant(s)

SINEX, BARRY

Examiner

Tuan C. To

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The indicated allowability of claim 6-10 is withdrawn in view of the previous cited reference as shown below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1 and 6, the citation "non-routine tasks that may exist", "routine tasks that may exist" are unclear to what if the tasks do not exist. Clarification is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Discenzo (US 6434512B1) and in view of Hartel et al. (US 5454074A).

With regards to claims 1 and 6, Discenzo disclose a system/method of performing a maintenance check of a vehicle such as an aircraft. Said system/method is provided for collecting and processing data relating to a plurality of subsystems of a dynamic system of a vehicle such as aircraft (Discenzo, abstract; column 25, lines 29-34), including:

“Obtaining and logging warrant-based reliability data from maintenance records generated during the performance of any routine or non-routine tasks that may exist, and which pertain to rotatable parts of the aircraft; obtaining and logging maintenance program-based reliability data from maintenance records generated during the performance of any non-routine tasks that may exist; obtaining and logging maintenance program-based reliability data from maintenance records generated during the performance of any identified routine tasks that may exist; and analyzing and reporting the warranty based reliability data and the maintenance program-based reliability data” (Discenzo, abstract; column 3, lines 14-29; column 9, lines 45-49).

Discenzo does not disclose the act of “identifying for each non-routine task, a routine task whose performance resulted in the generation of the non-routine task”.

The reference to Hartel et al. (US 5454074A) directs to a check list procedure performed during aircraft maintenance, comprising: a menu screen (Hartel et al, figure 4) showing a normal checklists and non-normal checklists. A normal task whose

Art Unit: 3663

performance result is generated as the result of the non-normal task (Hartel et al., column 15, lines 61-67; column 16, lines 1-4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Discenzo to include the teachings as taught by Hartel et al. so that a flight crew member or a mechanic can examine a maintenance report regarding which elements or parts that are needed to be repaired, and therefore to gain advantage therefore successfully solving the a potential mechanic problem prior a flight.

As to claims 2 and 7, Discenzo teaches that the display (92) functions to display data or other information relating to the operation of the motor (30) (Discenzo, figure 4a). Thus, the data regarding the rotatable parts such as rotating machines (motors, pumps, generators, etc) can be reported via the display device as said above.

As to claims 3 and 8, Discenzo teaches that the data are stored and display and that the data available for use during a maintenance process (Discenzo, column 11, lines 13-23; lines 56-59). Thus, the data as taught in Discenzo is inherently available for use in generating reports on modifications to a maintenance review board document.

As to claims 4, 5, 9, and 10, Discenzo teaches the method for recording and analyzing data for the aircraft, and that the method is operated over a communication medium (Discenzo, figure 4a, input device 94, display 92, memory 202, neural network 224, etc) operable connected to a plurality of input/output devices each having means for inputting and outputting information.

Response to Arguments

Applicant's arguments filed 02/13/2006 have been fully considered but they are not persuasive.

After reconsidering the application with special attention, the examiner has realized the cited references to Discenzo and Hartel teaches the method as now recited in claim 1. Discenzo and Hartel clearly shows the diagnostic system for recording and analyzing reliable data for the aircraft. The data collection and analysis system provided in Discenzo directs to a computer system, in which the reliable data of the rotatable machines such as motors, pumps, generators, etc can be obtained from the sensor device (see Discenzo, figure 4A). The computer system includes memory storage device for storing such data. It is important to note that such data is analyzed and processed by the processor (200). The processor generates a control signal in response to one of a group consisting of the subsystem health signal (Discenzo, abstract). In Hartel, an electronic checklist system is disclosed including a computer system for identifying either non-routine task, a routine task whose performance resulted in the generation of the non-routine task. As clearly shown in figure 5 of Hartel, a normal checklists and non-normal checklist are displayed, in which each task exists either in the normal checklists and non-normal checklist.

Claims 1-10 is now rejected.

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

Art Unit: 3663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner,

A handwritten signature in black ink, appearing to read 'Tuan C To', is written over a horizontal line.

Tuan C To

April 24, 2006